

# STANFORD UNIVERSITY NEWS SERVICE

RELEASE: Immediate

(For further information,  
call Jeff Littleboy.)

Stanford, California  
Davenport 1-2300. Local 2558

Southern California office  
621 S. Hope St., Los Angeles 17  
MAdison 7-0653

(EDITORS: Dr. Lederberg will discuss "exobiology" at a special press conference at Stanford Medical School at 4 p.m. on the day of his lecture, May 3, in the faculty room adjoining the dean's office. Enclosed map will assist your reporter and/or photographer.)

Is there life on other planets?

A Stanford University Medical School biologist thinks there might be, and is studying the types of microscopes and other devices that might be placed on Mars to find out.

Dr. Joshua Lederberg, Nobel Prize co-winner for his genetic studies, will discuss "exobiology"--his own term for extra-terrestrial life, at a public lecture at the University on Tuesday. His talk, "Biology of the Planets," begins at 7:30 p.m. in Dinkelspiel Auditorium. It is a Tuesday Evening Series presentation.

Dr. Lederberg put forward his views of "exobiology" in a paper delivered in Nice, France, on January 12 at the first annual Space Science Symposium sponsored by "COSPAR"--the international Committee on Space Research.

In his paper, Dr. Lederberg noted that Mars and Venus are primary targets for this type of space science research because of the possible presence of a temperate layer which might support biological life.

Earth plants, animals, and bacteria share a remarkable list of biochemical components hidden in the nucleic acids, and it now takes an alert scientist to distinguish an "hydrolysate of yeast cells from beef muscle, for instance."

Therefore, he asks, if extra-terrestrial life exists, does it also depend on the nucleic acids and the proteins, like our own?

One possible answer would be to plant ultra-violet microscopes on Mars in an area that appeared unusually rich in organic material. Pictures from a revolving strip of transparent tape which would carry samples past the microscope's aperture could be transmitted to earth by television for scientific scrutiny.

It is also possible, he cautions, that when we achieve space flight, we may well transfer bacterial life from the earth to other planets. This could be "followed by the explosive growth of the implant with consequences of even geochemical scope."

Dr. Lederberg was educated at Columbia and Yale. His major research interests are in the genetics of microorganisms, of which the study of evolution of microorganisms on other planets is an extension. He is a member of the Space Science Board of the National Academy of Sciences, to which he was elected in 1957.

In the following year he shared the Nobel Prize with Professors George Beadle of Caltech and Edward L. Tatum of the Rockefeller Institute in New York. Both are former Stanford faculty members.

###

4/26/60